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Attorney Docket No.

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25436/1340

09/492,590

**INFORMATION DISCLOSURE STATEMENT**

Applicant(s): Carstens, Carsten-Peter

Filing Date: January 27, 2000

Group: 1636

**U.S. PATENT DOCUMENTS**

Examiner Initial		Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
<i>AA2</i>	1	6270988	August 7, 2001	Brinkmann, et al.	435	69.1	

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Country	Class	Subclass	Translation	
							YES	NO

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**


EXAMINER

*Donald R. Lippert*

DATE CONSIDERED

*3-20-02*

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\*\*Copies of references not provided at the time of this submission.



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## INFORMATION DISCLOSURE STATEMENT

Applicant(s): Carstens, Carsten-Peter

Filing Date: January 27, 2000

Group 636

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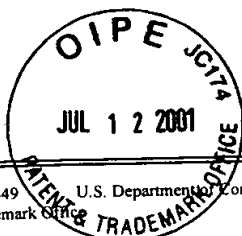
Ad	1	Kane, J.F., "Effects of rare codon clusters on high-level expression of heterologous proteins in Escherichia coli, <i>Current Opinion in Biotechnology</i> 6:494-500 (1995);	✓
	2	Bonekamp, et al, "Codon-defined ribosomal pausing in Escherichia coli detected by using the pyer attenuator to probe the coupling between transcription and translation", <i>Nucleic Acid Res</i> 13:4113-23 (1985);	✓
	3	Deana, A., et al. "Silent Mutations in the Escherichia coli ompa leader peptide region strongly affect transcription and translation in vivo", <i>Nucleic Acids Res</i> 26:4778-4782 (1998);	✓
	4	Rosenberg, A.H., et al., "Effects of consecutive AGG condons on translation in Escherichia coli, demonstrated with a versatile codon test system" <i>J. Bacteriol</i> 175:716-22 (1993);	✓
	5	Goldman, E., et al., "Consecutive low usage leucine codons block translation only when near the 5' end of a message in Escherichia Coli" <i>J. Mol. Biol.</i> 245:467-73(1995);	✓
	6	Degryse, E., "Influence of the second and third codon on the expression of recombinant hirudin in E. Coli" <i>FEBS Lett</i> , 269:244-6 (1990);	✓
	7	Spanjaard, R.A., et al., "Frameshift suppression at tandem AGA and AGG Condons by cloned tRNA genes: assigning a codon to argu tRNA and T4 tRNA (Arg), <i>Nucleic Acids Res.</i> 18:5031-6 (1990);	✓
	8	Kane, J.F., et al, "Novel in frame two codon translationalhop during synthesis of bovine placental lacotogen in a recombinant strain of Escherichia coli", <i>Nucleic Acids Res.</i> 20:6707-12 (1992);	✓
	9	Calderone, T.L., et al., "High-level misincorporation of lysine for arginine at AGA codons in a fusion protein expressed in Escherichia coli, <i>J. Mol. Biol</i> 262: 407-12 (1996);	✓
	10	Forman, M.D., et al "High level, context dependent misincorporation of lysine for arginine in Saccharomyces cerevisiaw a 1 homodomain expressed in Escherichia coli", <i>Protein Sci</i> 7:500-3 (1998);	✓
Ad	11	Brinkman, et al. "High level expression of recombinant genes in Escherichia Coli is dependent on the availability of the dna Y gene product", <i>Gene</i> 85:109-14 (1989);	✓

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AA2	12	Hua, et al, "Enhancement of Expression of human granulocyte-macrophage colony stimulating factor by argu gene product in escherichia coli" <i>Biochem Mol. Biol. Int.</i> 32:537-43 (1994);
	13	Chen, et al., "Role of the AGA/AGG codons, the rarest codons in global gene expression in Escherichia coli" <i>Genes Dev</i> 8:2641-52 (1994);
	14	Garcia, et al., "The argU Gene product enhances expression of the recombinant human interferon in Escheria coli" <i>Ann N.Y. Acad Sci</i> 782:79-86;
	15	Kim, et al., "Overexpression of archael proteins in Escherichia coli" <i>Biotech. Lett</i> 20:207-210 (1998);
	16	Rojiani, et al. "Relationship between protein synthesis and concentrations of charged and uncharged tRNA in Escheria Coli" <i>Proc. Nat. Acad. Sci U.S.A.</i> 87:1511-1515 (1990);
	17	Sharp, et al., "Codon usage in regulatory genes in Escherichia coli does not reflect selevtion for rare codons" <i>Nucleic Acids Res.</i> 14:7737-7749 (1986); and
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